REMARKS

The Office Action dated January 30, 2004 has been received and carefully noted. The above amendments to the claims, and the following remarks, are submitted as a full and complete response thereto. Claims 1-6 and 10 have been cancelled claims 7-13 and 15 have been amended to more particularly point out and distinctly claim the subject matter of the invention. Claim 11 has been placed in independent form, with claims 7-9 and 12-14 now depend from claim 11 and claims 31-33 have been added, where claim 31 is the former claim 3 in independent form and claim 32 is the former claim 5 in independent form. No new matter has been added. Claims 7-9 and 11-33 are respectfully submitted for consideration.

Claims 1, 2, 8, 10, 15-17, 20, 27 and 29 were rejected under 35 USC § 102(e) as being anticipated by *Baum et al.* (U.S. Patent No. 6,400,707). Claims 7, 9, 11, 13, 14, 18, 19 and 28 were rejected under 35 USC § 103(a) as being unpatentable over *Baum et al.* Claims 3, 5, 6, 12, 21-26 and 30 were rejected under 35 USC § 103(a) as being unpatentable over *Baum et al.* in view of *Klein et al.* (U.S. Patent No. 6,085,328). The Office Action took the position that *Baum et al.* disclosed all of the elements of the claims 3, 5, 6, 12, 21-26 and 30, with the exception of "using filter masks and comparing filtered information with filter table values." *Klein et al.* was cited as curing the deficiencies in *Baum et al.*, and the Office Action took the position that it would have been obvious to a person of ordinary skill in the art to combine *Baum et al.* and *Klein et al.* to yield the claimed invention. Applicants respectfully submit that the presently

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pending claims recite subject matter which is neither disclosed nor suggested in the cited prior art, as discussed below.

Claim 11, from which claims 7-9 and 12-14 depend, recites a method for switching VOIP packets in a data network. The method includes the steps of receiving a first packet in a network switch, determining if the first packet is a VOIP packet, determining a dynamically negotiated VOIP port for a VOIP session from at least one of the first packet and a second packet received in the network switch, if the first packet is determined to be the VOIP packet and classifying all subsequent VOIP packets corresponding to the dynamically negotiated VOIP port in accordance with predetermined parameters. Additionally, the step of classifying all subsequent VOIP packets further includes storing the dynamically negotiated VOIP port, filtering all packets coming through the network switch having the dynamically negotiated VOIP port associated therewith and classifying filtered packets in accordance with predefined filtering actions. Additionally, the step of storing the dynamically negotiated VOIP port further includes generating a filter corresponding to the dynamically negotiated VOIP port and storing the generated filter in a filter table associated with a fast filtering processor.

Claim 15, from which claims 16-19 depend, recites a method for switching VOIP packets. The method includes the steps of filtering packets received in a network switch to trap at least one VOIP call setup message, determining a dynamically negotiated VOIP port, filtering all subsequent packets associated with the dynamically negotiated VOIP

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port and taking predefined filtering actions upon the subsequent packets. The steps of filtering packets and determining the dynamically negotiated VOIP port further includes generating a filter corresponding to the dynamically negotiated VOIP port and storing the generated filter in a filter table associated with a fast filtering processor.

Claim 20, from which claims 21-30 depend, recites a network switch for switching VOIP packets. The network switch includes at least one data port interface controller supporting a plurality of data ports for transmitting and receiving data, a fast filtering processor in communication with the at least one data port interface and at least one filtering table in communication with the fast filtering processor. The fast filtering processor is configured to snoop packets being transmitted through the network switch to trap a VOIP call setup message, and thereafter, determine a dynamically negotiated VOIP port so that all subsequent VOIP packets can be filtered and assigned an appropriate priority.

Claim 31 recites a method for switching VOIP packets in a data network. The method includes the steps of receiving a first packet in a network switch, determining if the first packet is a VOIP packet, determining a dynamically negotiated VOIP port for a VOIP session from at least one of the first packet and a second packet received in the network switch, if the first packet is determined to be the VOIP packet and classifying all subsequent VOIP packets corresponding to the dynamically negotiated VOIP port in accordance with predetermined parameters. The steps of determining if the first packet is a VOIP packet, determining a dynamically negotiated VOIP port, and classifying

subsequent VOIP packets are performed in a filtering step by a fast filtering processor. Additionally, the filtering step further includes applying a filter mask to a header of a packet, extracting unmasked information, comparing the unmasked information to a filtering table and executing predetermined filtering actions based upon the comparison to the filtering table.

Claim 32, from which claim 33 depends, recites a method for switching VOIP packets in a data network. The method includes the steps of receiving a first packet in a network switch, determining if the first packet is a VOIP packet, determining a dynamically negotiated VOIP port for a VOIP session from at least one of the first packet and a second packet received in the network switch, if the first packet is determined to be the VOIP packet and classifying all subsequent VOIP packets corresponding to the dynamically negotiated VOIP port in accordance with predetermined parameters. The step of determining if the first packet is a VOIP packet further includes the steps of applying a filter mask to the packet header, comparing unmasked information from the header to entries in a filter table to determine a match and determining if a VOIP well known port is contained in the packet header.

As discussed in the present specification, the present invention enables an ability to switch VOIP packets in a data network. The use of the fast filtering processor to classify and filtering packets enables such switching to be more flexible and efficient that prior art methods. It is respectfully submitted that the prior art of *Baum et al.* and *Klein et al.*, when viewed or when combined, fails to disclose or suggest all of the elements of

any of the presently pending claims. Therefore, the prior art fails to provide the critical and unobvious advantages discussed above.

With respect to the rejections of claims 1, 2, 4, 7-11, 13-20 and 27-29, the rejections were made in view of *Baum et al*. *Baum et al*. is directed to a system and method for conducting voice communication through a hybrid network. In the rejections, Fig. 3 of *Baum et al*. is highlighted, where a computer 326 having a telephone 328 is connected through an IP network 310 to a PSTN 312. A firewall mechanism 338 is used to control access, where the firewall mechanism is illustrated as having a static firewall router 340, a packet switch 342 and a control processor 344.

In the rejection of claims 11, 13 and 14 in the Office Action, the Office acknowledges that "Baum et al does not expressly disclose storing the generated filter in a filter table." (Paper 5, paragraph 14) Applicants note that claim 20 was alleged to be anticipated by *Baum et al*. However, claim 20 explicitly recites as one element thereof "at least one filtering table in communication with the fast filtering processor." As such, Applicants respectfully assert that the rejection of claim 20 is improper because *Baum et al*. fails to teach all of the elements of that claim.

Similarly, claims 11, 15, 31 and 32 all recite storing the generated filter in a filter table associated with a fast filtering processor or a similar use of the filter table to store the generated filter. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." <u>Verdegaal Bros. v. Union Oil Co. of California</u>, 814 F.2d 628, 631, 2

USPQ2d 1051, 1053 (Fed. Cir. 1987). As such, Applicants respectfully assert that any anticipation rejection of those claims over *Baum et al.* would be improper.

Additionally, *Baum et al.* also details that "[e]ach filter is unique to a specific conversation. The *filter disappears on termination of the conversation.* As a result a high level of security is obtained." (column 6, lines 2-5, emphasis added). Based on the disclosure, there would be no reason to store any of the filters prepared and the reference teaches away from such storage and espouses the benefits of the temporary nature of the filter used. As such, Applicants respectfully assert that given the teachings of *Baum et al.*, it would not have been obvious to one of ordinary skill in the art "to store this information that the firewall filter uses in a table," as the Office Action urges.

If the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims prima facie obvious. In re Ratti, 270 F.2d 810, 123 USPQ 349 (CCPA 1959). Given the clear teachings of *Baum et al.*, Applicants respectfully assert that independent claims 11, 15, 20, 31 and 32, which all recite, in part, the use of a filter table, are not obvious in view of *Baum et al.*

Additionally, other elements of some of the claims were alleged as being taught or suggested by *Baum et al.* in the Office Action, which Applicants respectfully traverse. With respect to claim 27, the Office alleges that it is inherent that the firewall filter is connected to some sort of memory device. However, claim 27 recites more than some memory device and also recites a memory management unit and a communication

channel. Neither element is taught by *Baum et al.* and Applicants respectfully assert that that for this additional reason, claim 27 should be allowed over the cited prior art.

Claim 7 was rejected as being obvious in view of *Baum et al.* although it is acknowledged that *Baum et al.* fails to disclose determining a layer 4 port negotiated between 2 VOIP users. The Office alleges that it would have been obvious to extend the teachings of *Baum et al.* to two users. However, *Baum et al.* discloses that "[i]n the instant firewall mechanism of a preferred embodiment of the invention, routing at the third layer is not desired because it incurs an unacceptable amount of latency. According to a preferred embodiment of the invention, the unit takes the signal only up to the second or network layer." (column 5, lines 56-61). Thus, Applicants respectfully assert that determining a layer 4 port would not have been obvious in view of the clear teachings of *Baum et al.* and Applicants respectfully assert that that for this additional reason, claim 7 should be allowed over the cited prior art.

Turning now to the rejection of claims 3, 5, 6, 12, 21-26 and 30 over *Baum et al.* and *Klein et al.*, Applicants respectfully assert that even with the addition of the teachings of *Klein et al.*, the deficiencies of *Baum et al.* are not cured. *Klein et al.* is directed to a method of waking up a sleeping computer using packet snooping and imperfect filtering. The Office Action highlights Fig. 4 of *Klein et al.*, and its associated discussion, as teaching the application of a mask to a packet and a hash function is calculated. The result is used in a decision process to compare the resulting 16 bit value with certain values to determine whether the computer should be awakened.

First, it is noted *Klein et al.* fails to teach or suggest the elements, discussed above, that are not taught or suggested by *Baum et al.* *Klein et al.* fails to disclose a fast filtering processor or a filter table to store filters for use with that processor. Second, the teachings of *Klein et al.* fail to teach all of the elements of some of the claims that are alleged to be rejected by *Baum et al.* and *Klein et al.* Claim 21, for example, recites "said filter unit including filter logic for selecting desired fields of the incoming packet and copying selected field information therefrom." *Klein et al.* is silent with respect to the acquisition or use of fields of the packets and thus at least this element of claim 21 is neither taught nor suggested. Thus, Applicants respectfully assert that that for this additional reason, claims 3, 5, 6, 12, 21-26 and 30 should be allowed over *Baum et al.* and *Klein et al.*

In view of the above, Applicants respectfully submit that independent claims 11, 15, 20, 31 and 32 each recite subject matter which is neither disclosed nor suggested in a combination of *Baum et al.* and *Klein et al.* In addition, claims 7-9, 12-14, 16-19, 21-30 and 33, depend from the independent claims and should likewise be allowed for at least their dependence on the independent claims. It is therefore respectfully requested that all of claims 7-9 and 11-33 be allowed, and this application passed to issue.

If for any reason the Examiner determines that the application is not now in condition for allowance, it is respectfully requested that the Examiner contact, by telephone, the Applicants' undersigned attorney at the indicated telephone number to arrange for an interview to expedite the disposition of this application.

In the event this paper is not being timely filed, the applicants respectfully petition for an appropriate extension of time. Any fees for such an extension together with any additional fees may be charged to Counsel's Deposit Account 50-2222.

Respectfully submitted,

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